Please cancel claims 24-44 and add claims 45-67 as follows:

1-44. (Cancelled)

45. (New) A computer-implemented method for editing an expression, comprising:

  displaying a graphical representation of a tree that represents the expression, containing:

    a root node that includes a first operator of the expression;

    a plurality of internal nodes that include a plurality of operators of the expression; and

    a plurality of leaf nodes that include a plurality of operands of the expression;

  displaying a plurality of symbols, adjacent to the plurality of operands in the tree, the plurality of symbols and the plurality of operands representing the expression in infix notation;

  receiving user input indicating a change to a first portion of a user interface;

  updating a second portion of the user interface based on the received user input; and

  displaying the updated second portion of the user interface.

46. (New) The method of claim 45, further comprising displaying an expansion box, associated with an operator, configured to toggle between showing or hiding operands of the associated operator.

47. (New) The method of claim 45, wherein the first portion includes the plurality of operators, and wherein the second portion includes the plurality of operands and the plurality of symbols.

48. (New) The method of claim 47, wherein the change to the first portion includes one of an insertion of an operator and a deletion of an operator.

49. (New) The method of claim 47, wherein updating the second portion includes changing a symbol.

50. (New) The method of claim 45, wherein the first portion includes the plurality of operands and the plurality of symbols, and wherein the second portion includes the plurality of operators.

51. (New) The method of claim 50, wherein the change to the first portion includes one of an insertion of a parenthesis and a deletion of a parenthesis.

52. (New) The method of claim 50, wherein updating the second portion includes changing the graphical representation of the tree.

53. (New) The method of claim 45, wherein the plurality of symbols includes an open parenthesis that indicates an order of operations.

54. (New) The method of claim 53, wherein the open parenthesis is located adjacent to an operator.

55. (New) The method of claim 45, wherein an operator of the plurality of operators is displayed symbolically.

56. (New) The method of claim 45, wherein an operator of the plurality of operators is displayed textually.

57. (New) The method of claim 45, wherein the plurality of operators includes a logical operator.

58. (New) The method of claim 45, wherein an operand of the plurality of operands includes an expression that includes a comparative operator.

59. (New) The method of claim 45, wherein the expression comprises a Boolean expression.

60. (New) The method of claim 45, wherein the expression comprises a rule in a computer network security system.

61. (New) The method of claim 45, wherein the first portion and the second portion do not overlap.

62. (New) A computer-readable medium storing instructions for editing an expression, the instructions executable by a processor for performing a set of operations comprising:

    displaying a graphical representation of a tree that represents the expression, containing:

        a root node that includes a first operator of the expression;

        a plurality of internal nodes that include a plurality of operators of the expression;
            and

        a plurality of leaf nodes that include a plurality of operands of the expression;

    displaying a plurality of symbols, adjacent to the plurality of operands in the tree, the

        plurality of symbols and the plurality of operands representing the expression in

        infix notation;

    receiving user input indicating a change to a first portion of a user interface;

    updating a second portion of the user interface based on the received user input; and

    displaying the updated second portion of the user interface.

63. (New) The computer-readable medium of claim 62, wherein the first portion includes the plurality of operators, and wherein the second portion includes the plurality of operands and the plurality of symbols.

64. (New) The computer-readable medium of claim 62, wherein the first portion includes the plurality of operands and the plurality of symbols, and wherein the second portion includes the plurality of operators.

65. (New) A computer system for editing an expression, comprising:

    a display device configured to display:

a graphical representation of a tree that represents the expression, containing:

a root node that includes a first operator of the expression;

a plurality of internal nodes that include a plurality of operators of the expression; and

a plurality of leaf nodes that include a plurality of operands of the expression; and, additionally,

a plurality of symbols, adjacent to the plurality of operands in the tree, the plurality of symbols and the plurality of operands representing the expression in infix notation;

an input device configured to accept user input; and

a processor, coupled to the display device and to the input device, configured:

responsive to user input indicating a change to a first portion of a user interface, to update a second portion of the user interface based on the received user input.

66. (New) The computer system of claim 65, wherein the first portion includes the plurality of operators, and wherein the second portion includes the plurality of operands and the plurality of symbols.

67. (New) The computer system of claim 65, wherein the first portion includes the plurality of operands and the plurality of symbols, and wherein the second portion includes the plurality of operators.